

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
14 July 2005 (14.07.2005)

PCT

(10) International Publication Number
WO 2005/064967 A1

(51) International Patent Classification⁷: **H04Q 7/36**,
H01Q 3/26

(21) International Application Number:
PCT/EP2003/014981

(22) International Filing Date:
31 December 2003 (31.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): **TELEFONAKTIEBOLAGET LM ERICSSON (publ)**
[SE/SE]; S-164 83 Stockholm (SE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ASCHERMANN, Benedikt** [DE/DE]; Ilexweg 1A, 42111 Wuppertal (DE). **VAN NIGTEVECHT, Hans** [NL/NL]; Eekmatlaan 22, NL-7534 JV Enschede (NL). **HAGEMAN, Halbe** [NL/NL]; Abdissstraat 83, NL-4841 HG Prinsenbeek (NL).

(74) Agents: **DOHMEN, Johannes, M., G.** et al.; Algemeen Octrooi- en Merkenbureau, P.O. Box 645, NL-5600 AP Eindhoven (NL).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

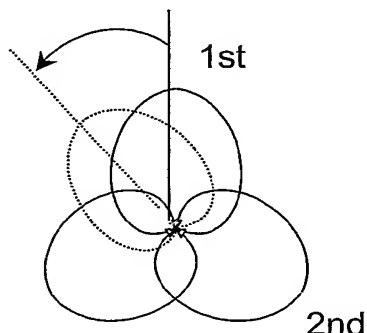
(84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DYNAMIC ANTENNA CONTROL



(57) Abstract: Undesired interfering signal sources within a wireless communication network disturb the radio communication between radio base stations and mobile stations. The invention presents a method and device wherein the beam pattern of an antenna, comprising two or more sectorised antenna elements with overlapping beam patterns, is adapted such that the position of the source of interfering signal is preferably substantially located within the overlap of said beam patterns. The one or more beam patterns are adapted in bearing such that the resulting interfering signal is reduced by the superimposing effect of radio wave propagation within the overlap area.

WO 2005/064967 A1